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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/090,806

03/06/2002

Masahiko Kawase

36856.648

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7590

06/08/2004

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EXAMINER

BEREZNY, NEMA O

ART UNIT

PAPER NUMBER

2813

DATE MAILED: 06/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/090,806

Applicant(s)

KAWASE ET AL.

Examiner

Nema O Berezny

Art Unit

2813

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 4-16-04, 5-11-04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 9-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 May 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 09/690,870.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)          |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. <u>05292004</u>                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4-16-04 has been entered.

### ***Specification***

Cancellation of claims 15-20 in paper filed 5-11-04 is acknowledged.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 9, 11, and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Ahiko et al. (2001/0019176). Ahiko discloses a manufacturing method of a chip-type

composite electronic component comprising the steps of: forming an inductor characteristic sheet by laminating a ceramic layer having an internal coil conductor; forming a thermistor characteristic sheet having a predetermined resistance-temperature characteristic by laminating a plurality of ceramic layers, each of at least two adjacent ceramic layers of the plurality of ceramic layers includes an internal electrode, wherein the internal electrode of one of the at least two adjacent ceramic layers extends from a central portion to a first edge of the ceramic layer, and the internal electrode of the other of the at least two adjacent ceramic layers extends from a central portion to a second edge of the ceramic layer that is opposite to the first edge; forming a compound multilayer body by adhering the inductor characteristic sheet and the thermistor characteristic sheet by pressure with a diffusion-prevention layer sandwiched therebetween; baking a compound multilayer body; forming external electrodes on an end surface of a compound multilayer body in which at least one end part of an internal coil conductor and at least one end part of one of said internal electrodes are exposed (p.8 para.141-146; p.3 para.44) **[claim 9]**. Ahiko also discloses further comprising the steps of connecting one end of the internal coil conductor of the inductor and one end of the internal electrode of the thermistor to one of the external electrodes, and connecting the other end of the internal coil conductor of the inductor and the other end of the internal electrode of the thermistor to the other of the external electrodes (Fig.3) **[claim 11]**; and further comprising the steps of providing an intermediate insulating layer and laminating the inductor and the thermistor via the intermediate insulating layer (p.8 para.141) **[claim 14]**.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ahiko as applied to claim 9 above, and further in view of Person et al. (5,321,573). Ahiko discloses wherein one end of the internal coil conductor of the inductor is connected to one of the external electrodes, and one end of the internal electrode of the thermistor is connected to the other of the external electrodes (p.8 para.141-146; p.3 para.44). However, Ahiko does not disclose the other end of the internal coil conductor of the inductor and the other end of the internal electrode of the thermistor being connected together. Person teaches providing electrical continuity, wherein Person discloses that the other end of the internal coil conductor of an inductor and the other end of the internal electrode of a thermistor are connected together (Fig.4-23; col.4 lines 20-26). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to use the connecting of the internal electrodes of Person with the method of Ahiko in order to provide electrical continuity between an inductor and a thermistor (Person - Fig.4-23; col.4 lines 20-26).

Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahiko as applied to claim 9 above, and further in view of Nagakubo et al. (5,966,938). Ahiko does not disclose a method wherein said thermistor is a negative-characteristic or a positive-characteristic thermistor. However, Nagakubo teaches a device in which both a heating operation and a cooling operation are controlled within one device, wherein Nagakubo discloses a control circuit device comprising a negative-characteristic and a positive characteristic thermistor (col.8 lines 37-47). Therefore, it would have been obvious to a person skilled in the art at the time of the invention to use the negative and positive characteristic thermistors of Nagakubo with the method of Ahiko in order to individually vary and control both a heating operation and a cooling operation for said device (Nagakubo - col.8 lines 37-39).

### ***Response to Arguments***

Applicant's arguments with respect to claims 9-14 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nema O Berezny whose telephone number is (571) 272-1686. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Whitehead, Jr. can be reached on (571) 272-1702. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NB

  
CARL WHITEHEAD, JR.  
SUPERVISORY PATENT EXAMINER  
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